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ABSTRACT

Procedures for the selection of gifted students through analysis and evaluation of test profiles are described in fictional form, using the activities and conversations of two counselors named Stan Devian and Norm Curve. The following principles were evolved: (1) a gifted student program must start with goals that are understood and accepted by the whole staff; (2) the program must be expressed in terms of what a particular school can do now or in the near future; (3) no one group within the school should have exclusive control of defining brightness or identifying the pupils who will qualify; (4) for practical reasons, keep separate the search for the intellectually gifted and the search for the gifted in other areas; and (5) multi-aptitude test batteries are essential to the comprehensive assessment of each pupil's level and pattern of mental abilities and as a basis for counseling. (KM)

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THE IDENTIFICATION OF THE GIFTED

STAN DEVIAN is a counselor in a junior-senior high school. There are two counselors. Mr. Devian is senior to his enthusiastic young colleague, Norm Curve. After getting a start in training through an NDEA Institute and then completing a standard MA program in Educational Counseling, Mr. Curve returned to the university for two more courses in measurement and statistics. Mr. Devian thinks counseling is so important that he has turned down two opportunities to become a principal.

Mr. Devian has been asked to chair a series of faculty meetings to bring about "a plan for providing better education for the gifted." After using that phrase at the opening session, he continued, subvocally, "Whatever that means. This will be a real go!"

The administrators and the teachers were genuinely concerned that something be done about the gifted. They were not sure what the program should be. Enrichment, acceleration, special projects, sectioning? They were agreed that there must be many gifted students in the school. As Miss Needler wryly explained, "After all, we're a typical school, half of our students must be above average, and three per cent in the upper three per cent."

But *who* are the gifted? The teachers said they knew from daily contact and looking at previous report cards. The director of research was sure he knew how to spot them: "I've got their grade placement ratings on last year's achievement test." But this challenge sparked the home economics teacher to voice her annual complaint that Dr. Trender never includes any tests of achievement in home economics, which exchange brought Miss Needler back into the conversation. Looking at the director of physical education she remarked, "Coach, you're the only person who has had as much as thirty years of experience in picking the best two or three per cent of talented kids and excluding all others from *your* program for your kind of gifted. What would you do?" This was met with general silence.

After a brief ploy by Dr. Trender on the centrality of achievement in the basic subjects, most of the faculty agreed that average grade placement, or stanines, on arithmetic, reading and language skills would be *one* sound basis for identifying the gifted. One violent holdout, however, was Mr. Astroblo, a young science instructor, who had won local distinction but almost lost his job last spring. His prize pupil, affectionately named Rocky the Rocketeer, with an F in French and a year lag in reading performance, had blown up half the bleachers while getting a three-pound rocket 1425 feet in the air in less than eight seconds.

The principal thought that some consideration should be given to youngsters from deprived homes. Asked for definitions, he remarked, "We'll get at that later. Perhaps," he added, "we should also adjust the ratings for these kids to allow for inborn abilities not yet flowering." This suggestion, or at least the problem from which it arose, was deemed worthy of an extended faculty discussion in November, but no one could think of a sound procedure for implementing the idea just now.

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After three sessions, the faculty had not agreed on who is gifted or how he should be identified. Mr. Devian realized that this rate of progress was about par for the course. Having attended symposia on giftedness at two conventions recently, he had acquired high tolerance for non-closure on the topic.

In October, the superintendent expressed concern that the state allowance for such projects would lapse "for lack of our capacity to answer a simple question: Who are our gifted—or talented—or academically able—or high capacity children? Let's cut through the middle of the problem with an operating decision. We can't make all the decisions right, but, on the whole, we can identify these unusual students one way or another. The simpler and more automatic the procedure the better." Speaking with his most administrative inflections, he turned to Mr. Devian. "Stan, why don't you and Norm Curve carry the ball? You've got intelligence tests on all these students. Can't we, by Thursday a week, have a list of the gifted—say, those in the highest three per cent in IQ—or anything you think best?" With a quiet sigh, Mr. Curve appreciated the "out" in the superintendent's trailing phrase.

The faculty sensed difficulties, but at least here were objectivity, precision, and, all in all, a quite defensible approach. Certainly you could explain straightforward rules to the PTA. Stan groaned a bit, which the faculty took as a protest over getting the job of working extra hours to spot the bright kids. Actually, his mind was gyrating with concepts he had learned well in graduate school, terms like individual differences, multipotentiality, multi-score ability tests, standard error of measurement, reliability, significance of differences.

Stan Devian and Norm Curve agreed to go right to work. In their school the ninth graders had just taken the *Differential Aptitude Tests*. There were neat rosters, in duplicate, and press-on labels were already in the cumulative files. Last week, the two men had begun poring over these rosters, mainly studying the profiles of the forty-seven boys who had been called under-achievers by the teachers last spring, the four boys who were under out-patient psychiatric care in the community clinic, the twelve boys who had skipped more than five days so far out of twenty-five school days—and so on.* There were even a dozen students classed as over-achievers, a topic which surely called for a technical discussion with the faculty about running faster than one can, about errors of scores, and about the 12-hour school day some youngsters live.

*There are girls in this school but a lot of print space can be saved by writing "boys" instead of "boys and girls."

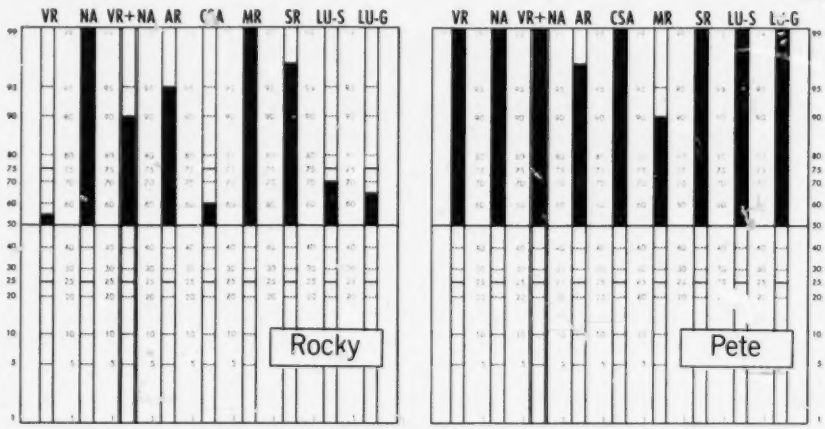
Lighting a cigarette, Norm quipped, "Let's give the class that famous 12-minute test. A few minutes—and we can just rank the 444 kids from top to bottom, chop off the 13.32 cases who are the upper three per cent." Chewing the soft wood of his electrographic pencil for a full minute, Stan mused, "But I'm still thinking about Rocky the Rocketeer who seems so bright but we can't keep him interested in verbal things. He'd be lucky to reach the 75th percentile on your bushel-basket verbal test."

"You're right, Stan, and for every Rocky you name, I can spot another youngster with an odd profile on the DAT who would be excluded from the boss's list if we only do a quick and dirty screening with wordy tests. But we've got the DAT profiles and it looks like both of us want to give the whole staff a stiff lesson in individual differences – both up and down each scale and sidewise across the ability spectrum. Let's dig in."

"Yeah, we can't lose. If we can't convince them that the term 'top three per cent in intelligence' is mostly meaningless, we can always fall back on rank order of students on a scholastic index. The VR + NA† score on the DAT would be as reasonable as any."

"While we're at it," said Norm, "let's raise serious questions about what mental ability is composed of. We don't need to include push-ups and chinning or soloing on the clarinet as components of mental ability, but with the DAT we can talk about some other variables which are socially and educationally relevant. By the way, I was looking at two profiles today which might illustrate something or other. Look at these. One happens to be Rocky the Rocketeer and this one is the chap who was generally recognized as the school genius last year. No one will argue that Pete isn't a brain, an all-around brain, too. He'll show up on the nomination sheets the teachers are going to give us. Doc Trender's grade placements will probably spot him. But now, look at Rocky—

†VR + NA is a combined score based on the Verbal Reasoning and Numerical Ability subtests of the DAT battery. The two tests and the score combining them are good predictors of academic performance.



he's only at the 90th percentile on VR + NA. On the boss's quickie rule we're not even supposed to mention his name to the faculty! He's verbally weak—his VR actually is near the median, and his language skills eliminate him. But how, in all good conscience, can we escape calling him a special kind of brain? Look what he has! Old Trendy will say that we're reneging on our own knowledge about what the best predictors of academic grades are. So what! Rocky's got something; and if you want to put it in terms of Red, White, and Blue, he's got something Uncle Sam needs badly."

Nodding agreement, Stan added, "He's really an upper-three-percenter by some good logic—even if it may be in abilities we don't know how to teach for in this school. Our ways of grading for classroom performance don't permit him to scintillate in his 'course of study.' Maybe his verbal score is associated with the fact that his father and mother came to America just 16 years ago. Maybe we can boost his language abilities. If we could convince someone that Rocky is talented, really gifted, somebody might latch on to his best talents and make them a motivating force for upgrading even his lagging language skills."

A week later Stan Devian and Norm Curve had studied the DAT rosters, their eyes exophoric from focussing widely across the nine-column profile of each pupil. Each came up with a working list of names. But still they were not sure of a rationale for making final nominations. Stan, the senior man on the team, set the task.

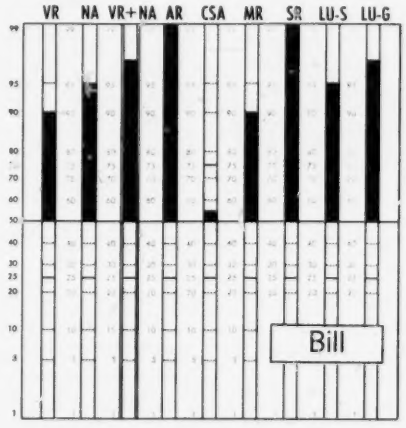
"Our first screening could be this: All students who rank in the upper tenth on VR + NA will enter our pool of candidates for nomination as mentally gifted, possessing high academic talent. These we can say are the academically superior youngsters in grade 9; but their inclusion here doesn't mean we are going to predict they'll all be in the upper brackets when they go to college or try for advanced placement. Let's remember, a percentile rank of 90 on VR + NA in grade 9 is roughly equivalent to about 500-550 on V and M on the College Board SAT in grade 12. So this step will be picking out more than we need but at least we have a chance to give Rocky with his wiggly profile a chance at being tagged as meriting consideration for, say, accelerated math this year and the special physics course a couple of years from now. Then, among those we have thus spotted for test-estimated scholastic promise, let's look at the rest of the test profiles for over-all breadth of ability or some one or two other peaks."

"I was thinking in the same direction, Stan," said Norm. "To [illegible] I made this table* last night to put the boys in a sort of logical order. Group A shows the boys with VR + NA at the 99th percentile; there are 18 of them. Group B includes boys at the 97th percentile. In each group, I have ordered them roughly by the number of tests on which they ranked above 95 and 90. To reduce the numbers in the chart and to focus on the high points, I have written a plus sign if a boy's rank was under 90, but still high (percentile rank of 75, 80, or 85) and a minus sign when the rank was under 75. (I left out the Clerical score because it may not mean much for this purpose; we can come back to it when we talk with these boys individually.) Now obviously our boy Pete is top man. There are in all 13 who rank 90 or above in at least *five* of the *seven separate* scores we are considering. These are the all-around talented chaps. I say, let's include *all the ninety-niners* on our nomination list, even the five boys who rate 90 or better on only two to four of the seven scales. As you said, let's call them the very academically superior, *most* of whom also possess *breadth* of superiority."

While obviously agreeing, Stan expressed concern about individual differences even in this group who had just been declared intellectually homogeneous at the 99th percentile. "Just for the record, I submit that Nos. 17 and 18 are not the same kind of top one-percenters as are boys 1 to 13. But, OK, they're bright in anybody's book. What about the ninety-seveners—the boys who just reach the superintendent's 'practical decision' point?"

Curve dragged out more of his homework. "Well, I plotted profiles for a couple of these—Bill Brown and Stu Strong. Their patterns don't look alike, even though we'd agree that both are generally bright, on VR + NA, and probably should be in our list for some particular curricular projects. Who knows, maybe Bill's better abilities may be less important than the greater motivations of Stu. By the way, there's a problem we haven't faced yet. How many points of elevation and breadth of profiled abilities are equal to how many points of

*See next page.



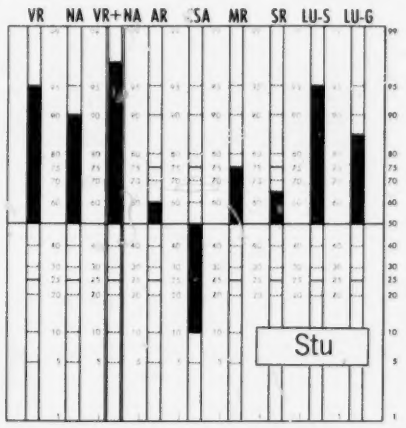


TABLE I. Profiles of students whose DAT VR + NA Scores are at the 99th, 97th, 95th, and 90th percentiles

GROUP A. VR + NA is at 99th percentile

Student	VR + NA	VR	NA	AR	MR	SR	LU-I	LU-II
1 (Pete)	99	99	99	97	90	99	99	99
2	99	99	95	95	95	95	95	95
3	99	97	99	97	90	95	97	99
4	99	99	97	97	90	97	95	95
5	99	95	97	97	90	95	99	95
6	99	97	97	95	95	95	+*	97
7	99	99	99	97	90	99	90	97
8	99	99	99	99	90	97	+	99
9	99	97	97	97	90	95	90	90
10	99	97	99	99	95	99	—	90
11	99	99	97	+	97	97	—	97
12	99	97	90	99	90	95	90	+
13	99	97	90	90	90	95	+	+
14	99	97	99	97	—	+	—	95
15	99	95	99	+	+	—	97	95
16	99	97	95	+	90	+	95	—
17	99	97	90	+	—	90	+	+
18	99	99	95	+	—	+	+	—

GROUP B. VR + NA is at 97th percentile

Student	VR + NA	VR	NA	AR	MR	SR	LU-I	LU-II
1 (Bill)	97	90	95	99	90	99	95	97
2	97	90	97	99	—	90	95	95
3	97	95	95	95	90	99	—	+
4	97	95	97	95	90	+	+	+
5	97	97	85	97	95	+	90	+
6	97	97	90	+	95	—	+	90
7	97	95	90	90	95	+	—	90
8	97	95	97	+	+	+	+	+
9	97	90	95	+	—	—	90	97
10 (Stu)	97	95	90	—	+	—	95	+
11	97	90	99	90	—	+	+	+

* To simplify the story, percentile ranks of 75, 80, and 85 on all but VR and NA are recorded here as + signs; percentile ranks under the 75th are recorded as — signs. Percentile ranks for Clerical Speed and Accuracy are omitted because of their general irrelevance for the selection of the intellectually gifted.

GROUP C. VR + NA is at 95th percentile

Student	VR + NA	VR	NA	AR	MR	SR	LU-I	LU-II
1 (Mike)	95	90	90	99	—	97	+	95
2	95	85	95	97	+	+	95	90
3	95	85	95	99	—	95	+	90
4	95	70	99	—	95	95	+	90
5	95	95	85	+	95	—	+	95
6	95	97	80	99	+	97	+	+
7	95	75	99	95	—	—	95	+
8	95	95	85	+	—	+	90	97
9	95	90	90	95	—	—	—	90
10	95	95	85	+	+	—	—	90
11	95	60	99	95	—	—	+	+
12	95	97	80	+	—	—	—	90
13	95	85	90	90	+	+	—	—
14	95	95	85	+	—	—	+	+
15	95	90	85	99	—	—	—	—
16	95	85	90	—	—	—	—	—

GROUP D. VR + NA is at 90th percentile

Student	VR + NA	VR	NA	AR	MR	SR	LU-I	LU-II
1 (Percy)	90	85	80	95	90	97	97	90
2	90	90	75	99	90	97	95	+
3	90	70	95	+	99	99	—	95
4 (Rocky)	90	55	99	95	99	97	—	—
5	90	97	45	90	+	+	95	+
6	90	85	80	97	+	97	—	+
7	90	85	85	95	+	—	90	90
8	90	90	85	97	+	+	+	90
9	90	85	90	97	90	97	—	—
10	90	70	95	+	90	95	—	—
11	90	80	90	97	—	90	—	+
12	90	85	90	+	95	—	+	+
13	90	85	85	95	—	95	—	—
14	90	80	85	97	—	+	+	+
15	90	85	80	90	—	+	—	+
16	90	75	90	—	—	—	+	90
17	90	85	80	—	—	+	—	90
18	90	85	85	+	—	+	+	—
19	90	90	75	+	—	—	—	+
20	90	85	85	—	—	—	—	+

motivation, such as we've asked the teachers to take into account in making their nominations? And, a second needle: Do we plan different programs for Stu and Bill, if, as I guess, their interests are different?"

"I do hope the teachers understand, Norm, that their nominations to the 'pool of genius' are to be taken seriously. The boss's stress on *our* spotting the upper three per cent students may stifle the teachers. Let's pass the word today that we don't want to, and won't, make the decisions from the tests alone. The best reason for not

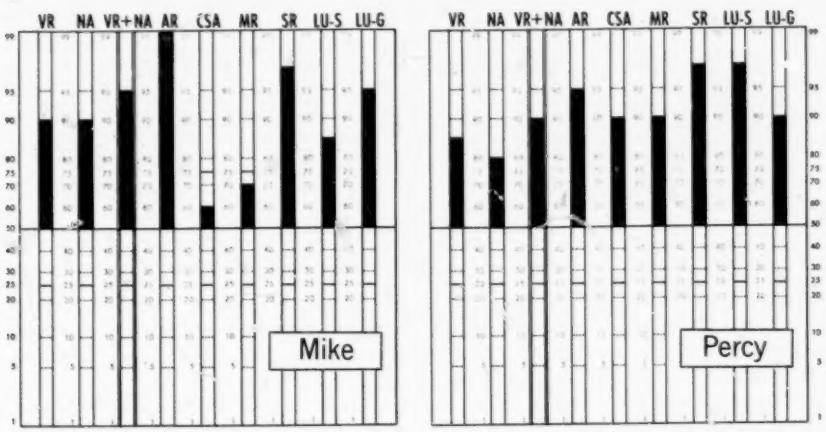
having a rigid cutoff score for classifying brilliance is that all the test scores and all the faculty opinions have an error term. Each score and each opinion indicates a region or a probability, not a point or a certainty. Let's get going! The question before the house now is: Are those at the 95th percentile brilliant? Let me give you a loaded pair of profiles. Look at Stu again. He qualifies on academic promise; he's 97 on a good predictor. Now look at Mike Lodge: he's Number 1 in Group C. He illustrates the point that life would be easier if we could really be happy with bureaucratically or legally defined minimum scores to define giftedness. Stu is in, he's 97; Mike is out, he's 95. But all in all, Mike looks good too. We'll have to explain to the staff that even if we have no satisfactory method of profile analysis, just studying the profiles of Mike and the others will cause us to consider both *elevation* of one score and *versatility* over several abilities. I wish we could put these two dimensions into a simple formula. Five of Mike's test scores are 90 or better as against three for Stu. Look at his nonverbal abilities.

"You know," Stan continued, "I'm against any system that counts Mike out of a program for generally superior students if it includes Stu. I can't say as much for *all* those in Group C, though. Look at C-16 – his 85 and 90 on VR and NA give him 95 on the combination score, but he hasn't another up to the 75th percentile."

The discussion went on about the boys with ranks of 90 on VR + NA. Each man admitted to the temptation of biasing the profiles upwards if he knew a boy was a serious student, an easy-to-live-with conformist, or an unusually talented basketball player. Especially challenging was Percy Stone: every test 80 or above, three at 95 or better, three others at 90, and a VR + NA rank of 90. Compared to Bill, Stu, and Mike, this chap too, they agreed, was generally superior.

Stan put it this way. "Surely Percy has a breadth of abilities which he should be able to develop and mobilize for any one of many intellectually demanding careers. If we had norms based on a *total score* from all the DAT components, I guess he'd be in the 99th percentile on such an eight-test combination, but you know the reasons why the authors do not provide such a single score. One of them is to make us think about each case in differential detail rather than settle for a single index number, a sort of super-IQ. Some teachers tell me they hanker for the good old days, the one-score IQ days. If we show them some of these profiles we have been explaining to ourselves, maybe they'll understand better why a single composite test score at some predetermined level is not a satisfactory basis for identifying and understanding the gifted. We must help teachers to think about bright kids as being differently versatile. To do that, *breadth* of measurement is the key. For every generally superior kid who has a flat, high-level profile there are others who have real peaks and valleys."

At home that night, Stan's restlessness about the issue of who is gifted drove him to his study to think. After much thinking with pipe in hand, five pipe cleanings and 45 matches, he began to think with pencil in hand. The next morning he greeted Norm. "You know, Norm, identifying bright kids doesn't make much sense unless we know why we want to know who they are and what we can do about them. You and I are only part of this team which is committed to developing a better program in our school for the 'feeding and care of bright young things.' We're the psychometric boys, others are the curriculum makers, and somebody's even got to worry about the public relations aspects of a program for the gifted. When this selection job is done, we'll be expected to swivel our chairs around and become counselors to build fires under the cold geniuses, to help the intellectual flailers direct their energies, to show parents where their pride should be. Last night I was trying to pull together what I have learned about the *role of test scores* in this problem. I ended up with what I am hoping you will agree we can call 'The Counselor's Policy on Giftedness.' I guess no one will agree with all of it, but, give or take a little, I'll stand on this statement of principles* for use of ability tests in identifying the mentally superior, or the high potentials – you choose your term. Want to talk about it?"



Stan suggested that they read each principle and then haggle about its meaning, mainly because he wanted to be ready to handle discussion from the floor in faculty meeting.

"Point one is a fine cliché, Stan, but it's got to be point one in any outline. OK, let's assume we have good goals and the community wants us to do something special

*See next page.

A Counselor's Policy on Giftedness
The Role of Tests in Selecting the Gifted

1

A gifted student program must start with *goals* — goals which are understood and accepted by the whole staff. The goals will determine in part the procedures, including tests, which are appropriate for identifying the gifted.

2

A gifted student program must be expressed in terms of what a particular school can do now, or can arrange to do soon, for gifted students. Test scores on aptitude and achievement batteries become maximally useful only when the proposed differentiation of treatment of the gifted becomes reasonably clear.

3

No one group within the school should have exclusive control on defining brightness or identifying the pupils who will qualify. Superior abilities can be identified by teachers and principals; by achievement tests; by ability tests; and even by the students themselves, who often show considerable accuracy of self-appraisal. *Nominations* should come from all competent personnel. Final administrative determinations should not be in terms of some narrow concept, but in terms of which pupils would likely be best served by each of the special educational efforts this school can provide.

4

For practical reasons, keep separate the search for the intellectually gifted — the gifted in the cognitive areas — and the search for the gifted in music, arts, physical skills, and social leadership. Aptitudes for these latter fields should also be evaluated in planning for those pupils who are mentally gifted. Similarly, mental abilities are relevant in assessing potential artists, dancers, and social leaders and planning their programs. When the purpose is to enhance and accelerate the education of the mentally gifted, the focus on assessing of cognitive abilities and achievements must be sharp.

5

Intellectual giftedness presents itself in many ways. Multi-aptitude test batteries are essential to the comprehensive assessment of each pupil's level and pattern of mental abilities. Beyond their use in selection, multi-aptitude batteries provide the basis for comprehensive counseling of the gifted and for determining what remedial or special work may be needed to avoid limitations on individual gifts arising out of deficiencies in basic, learnable skills.

for its intellectually gifted boys and girls. And, let's also assume there will be continuous refinement of goals."

Silently they read the next few points.

"Stop squirming, Norm. Before you clobber me for merely stating the obvious in point two, let me say that I don't believe we're going to end up with a clean and neat series of *unusual* educational sequences for the gifted. Let's assume there will be some variety in what the curriculum thinkers come up with and the budget department will finance. Our first job is to hold out against narrowness and rigidity of programs. Brilliant boys and girls do not display brilliance in the same patterns; let's insist on a program which is responsive to the range of individual patterns."

After a quarter hour of trying to tease out the operational bugs in a nomination procedure, Norm proposed that Stan have these points in mind for oral clarification: "First, most schools probably have informal nominating procedures, although 'voting in' and 'vetoing out' of pupils may sometimes be dominated by one or more prestigious, or just plain vocal, persons. Then, a school like ours, with 900 boys and girls in grade 9, certainly needs a formal procedure. Third, nominations by the various specialists and the teachers may be quite contaminated since some teachers have records of grade placement and ability tests in their class books; lunchroom and corridor talk among teachers about pupils surely raises the intercorrelations among their so-called independent nominations; and the climate of the school or departments within the school may be such that even a little nonconformity is equated to irresponsible trouble-making. Fourth, granted all this, a formal nomination system still greatly increases the probability that no unusually gifted child is omitted from consideration. For example, the objective tests will protect the interests of a bright but unliked and troublesome pupil who may find himself unlisted by the faculty; since pupils can 'goof' on tests, nominations by teachers can protect them from too much objectivity. Lastly, whatever we do, let's not make a plan which even suggests that the ultimate responsibility for developing these pupils we judge to have high abilities rests anywhere else than in the classroom."

The fourth point seemed fairly clear and obvious. Perhaps relevant was Norm's general concern that too many teachers and parents still seem to be "either-or" thinkers: Artistic talent and intellectual abilities are still thought by many to be negatively correlated in spite of the mass of evidence that in the matter of aptitudes, the so-called "law of compensation" is not valid.

Elaborating on his own fifth point, Stan said, "Sure, a one- or two-score IQ-type test could give us an over-all estimate of general level of ability which might be useful if all we want is gross classification. But multi-score aptitude batteries, just like multi-subject achievement batteries, can yield reliable differential information which will enrich the descriptions of students who are

candidates for special attention. Considering the range and social utility of all the various human assets, fairly extensive multi-score testing schedules are justified. I believe you will agree, Norm, that we must come up with rather precise examples of the idea that talent is a many-splendored thing. Let's look again at that list of students' percentile ranks on the DAT. Why don't we mimeograph it and, to keep the argument objective, let's omit all the names, except for the few boys for whom you have drawn profiles. Then let's put the profiles on the opaque projector so all can see the point. And later when we are helping the faculty write out their guides for nominating pupils, let's try to convince them that they might well engage in this same kind of thinking about their pupils' classroom performances, so that they, too, will nominate not only the verbal scholars but also those superior in other abilities. We might even get some nominations of budding basement chemists with bottom quarter sociability."

"And that isn't necessarily bad," added Curve, as he gave his final consent to the list of guidelines.

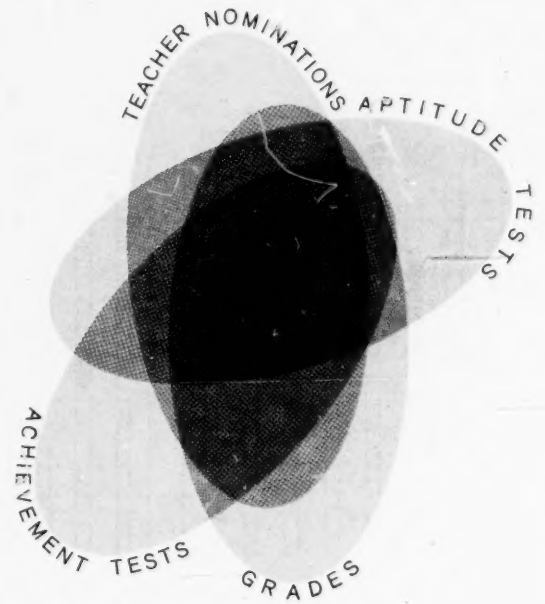
"That reminds me, Norm, we may have some problems with our roster of percentile ranks. I had a little hassle at lunch yesterday with Miss Alpha. You know, she's great on Greek culture but literally fears numbers. She can't quite see how a person who ranks at the 90th percentile on Verbal Reasoning and also on Numerical Ability can possibly be ranked at the 95th percentile on the combination score, VR + NA. She insists such a person's average rank of 90 must be his rank on the combination. I think I got the idea across that a fairly good clarinet player who is also a fairly good tap dancer is a more rare entertainer than is one who is fairly good on either but not on both. Now, our problem is this: How shall we set our cutoff scores on the parts of this battery to be sure we don't pass over both the less versatile pupil who scores extremely high on one or two tests and the more versatile student who may not be in the upper one or three per cent in any test but whose scores are generally high all across the profile?

"Norm, look again at your rank order listing. Group A, as a group, seems more gifted than Group B; and so also Group C, as a whole, seems more able than the D's. We could just settle for listing the 99's, the 97's, and maybe the 95's, keeping the list of boys ranking at 90 in our pocket for quick referral if anyone else proposes any of the names. But, if we do that, then we're saying that the narrowly bright boys, like C-15 and C-16, are more gifted than are Percy, your D-1; Rocky who is D-4; and also D-2 and D-3, for instance. It seems to me that we must avoid just setting up a simple rank order list and chopping it off somewhere."

Norm had been doodling away at various times during the past hour. Passing a sheet to Stan, he said, in his best audio-visual voice, "These blobs are my idea of what our strategy should be. We, the aptitude test specialists, nominate a fairly large blob of students. So do the teachers. Incidentally, who is going to help them agree on how to make their composite list? Dr. Trender can identify a similar cluster of students from the achievement test results and scores, and the school clerk can provide the names of the top fifteen per cent in rank order on average grades. These overlapping blobs will include some students who are on all four lists—the real dark area in my sketch. There won't be perfect correlation among the nominators' lists; some areas will overlap more than others. I suspect the aptitude test list and achievement test list will overlap most. But any pupil who appears on all four lists surely could be labelled academically gifted without much further discussion."

Thinking of his committee chairmanship, Stan suggested that Norm use this sketch to show the faculty why each nomination list must include a considerably higher percentage of the class than the percentage the faculty thought should be included finally in a group of gifted for whom special courses could be arranged. "Incidentally," he remarked, "this sketch illustrates another case of the same problem I tried to explain to Miss Alpha yesterday. Suppose I suggest that each group bring in a list including ten to fifteen per cent of the class, hoping that when we study the overlapping, maybe five per cent will be on at least two out of four lists?"

Norm, pushing hard toward arriving at a precise plan, interrupted, "I was thinking that we might define three levels of decision. I'd like to propose something like this: (1) All students nominated three or four times are to be called gifted and set aside for whatever program



assignment we find appropriate for each in the light of all the information we have. (2) A student receiving two nominations is to be called gifted *unless* someone can advance information which is so convincing that the committee decides he should be excluded from special treatment, at least for the next term. (3) A student nominated on only one list *may* be included if his sponsors can convince the committee that he is intellectually unusual and well-motivated and deserves a try at the curriculum for the gifted, perhaps some one course for which he is unusually fitted."

"OK, Norm, that about winds up our chore with regard to our own list of nominees from aptitude tests and our ideas of a good procedure for integrating the information we get from the four sources of nominations. Incidentally, I'm sure some clever fellow in an electronic data processing center will tell us he could do this job faster and better. I'll agree – with some big *ifs*, the same iffiness which has forced us to use the human computer. The big *ifs* are these: *If* we knew all the variables, *if* we knew how to weight all the variables, *if* we knew how the ratings on all the variables were correlated, and *if* we had precise estimates of the errors in scores and judgments, *then* we might reduce the search for talent to punched card procedures."

"Well, fortunately, Stan, our decisions need not and, indeed, must not, be irreversible. I sincerely hope the continuing faculty evaluations and our counseling work with the gifted will result in some flow of students into these programs as evidence on the performance of our chosen gifted accumulates and as new evidence of unusualness appears for some late bloomers. Once this job of selection is done, we'll put on our other hats, assume our roles as counselors for educational and career planning and as consultants to the faculty on pupil motivation and adjustment in their programs. I'm sure quite a few of these intellectually gifted will need to clarify their images of themselves as potential scholars. Some of the leather-jacket, duck-haircut boys may even resist being identified as bright. Some parents may not have realized the dormant power in their little Dennis-the-Menaces. We'll need to do a job in guiding some through remedial programs to bolster their weaker skills. Golly, Stan, our work is never done. Now just as you've relaxed and feel you have completed our departmental task and your committee chairmanship is under control, let me toss you some more homework. Just to tease you a bit, and certainly not to suggest that these three boys meet high standards of academic promise, take a gander at Joe, Hank, and Bob. They are just a few of the boys in this school who rank low on VR + NA. They aren't 'college material' by any generally accepted definition, but each one has one or more high scores on the less verbal aptitudes reflected in Abstract Reasoning, Space Relations, and Mechanical Reasoning. I ask you, Stan, are they gifted?"

"All I can say, Norm, is that our school hasn't yet recognized that for every Indian chief we need a dozen competent Indians. For every new executive in an automated plant, we need a dozen guys who can set up, monitor, and fix the automations! I suspect our next big job, Norm, is to tell the faculty, administrators, the Board of Education, and the taxpayers about Joe, Hank, and Bob. But first we'd better get the gifted scholars off the ground!"

"Sure, Stan, just remember these kids have been waiting a long time while the geniuses and the retarded get center stage and lots of subsidy!" – H. G. S.